CLAIMS

1. A system, comprising:

a first device configured to request a data set having a plurality of individual records, the individual records having information to describe data in the data set;

a second device configured to receive the request and encode the data set with a compression function to generate an encoded data set, the compression function determined from information that is common to the individual records in the data set;

the second device further configured to communicate an expansion function to the first device, the expansion function including the information that is common to the individual records in the data set; and

the first device further configured to receive the encoded data set and expand the encoded data set with the expansion function, wherein individual records in the encoded data set are expanded to include the common information.

2. A system as recited in claim 1, further comprising a communication component configured to compress the encoded data set using a content compression algorithm before communicating the encoded data set to the first device.

3. A system as recited in claim 1, further comprising a first communication component configured to compress the encoded data set using a content compression algorithm before communicating the encoded data set to the first device, and a second communication component configured to decompress the encoded data set before the first device receives the encoded data set.

4. A system as recited in claim 1, wherein the second device is further configured to determine the compression function after receiving the request for the data set.

5. A system as recited in claim 1, wherein the first device is further configured to render the individual records in the data set after the first device expands the encoded data set with the expansion function.

6. A system as recited in claim 1, wherein the first device is further configured to render the individual records in the data set before the first device expands the encoded data set with the expansion function.

7. A system as recited in claim 1, wherein the second device encodes the entire data set with the compression function and communicates the encoded data set to the first device.

8. A system as recited in claim 1, wherein the second device generates the encoded data set by removing the information that is common to the individual records in the data set.

9.   A system as recited in claim 1, wherein the second device generates the encoded data set by removing only the information that is common to the individual records in the data set.

10.   A system as recited in claim 1, wherein the encoded data set includes the data without the information that is common to the individual records in the data set.

11.   A system as recited in claim 1, wherein the data is not encoded with the compression function, and wherein the information that is common to the individual records in the data set is encoded with the compression function.

12.   A logical compression system, comprising:

a data set having a plurality of individual records, the individual records having semantic information to describe data in the data set;

a compression function determined from semantic information that is common to the individual records in the data set;

an expansion function that includes the semantic information that is common to the individual records in the data set; and

wherein the data set is encoded using the compression function to generate an encoded data set that is communicated to a destination device along with the expansion function, such that the encoded data set can be expanded at the destination device.

13. A logical compression system as recited in claim 12, wherein the encoded data set is compressed using a content compression algorithm before the encoded data set is communicated to the destination device.

14. A logical compression system as recited in claim 12, wherein the encoded data set is compressed using a content compression algorithm before the encoded data set is communicated to the destination device, and wherein the encoded data set is decompressed before the destination device receives the encoded data set.

15. A logical compression system as recited in claim 12, wherein the individual records include text data and semantic information associated with the text data to describe the text data.

16. A logical compression system as recited in claim 12, wherein the individual records include text data and semantic information associated with the text data to describe the text data, and wherein the quantity of the semantic information is significantly greater than the quantity of the text data in each of the individual records.

17. A logical compression system as recited in claim 12, wherein the individual records include image data and semantic information associated with the image data to describe the image data.

18. A logical compression system as recited in claim 12, wherein the individual records include image data and semantic information associated with the image data to describe the image data, and wherein the quantity of the semantic information is significantly greater than the quantity of the image data in each of the individual records.

19. A logical compression system as recited in claim 12, wherein the compression function is determined after receiving a request for the data set.

20. A logical compression system as recited in claim 12, wherein the compression function is determined before receiving a request for the data set.

21. A logical compression system as recited in claim 12, wherein individual records in the encoded data set are rendered at the destination device after the encoded data set is expanded.

22. A logical compression system as recited in claim 12, wherein individual records in the encoded data set are rendered at the destination device before the encoded data set is expanded.

23. A logical compression system as recited in claim 12, wherein the entire data set is encoded with the compression function to generate the encoded data set that is communicated to the destination device.

24. A logical compression system as recited in claim 12, wherein the encoded data set is generated by removing the semantic information that is common to the individual records in the data set.

25. A logical compression system as recited in claim 12, wherein the encoded data set is generated by removing only the semantic information that is common to the individual records in the data set.

26. A logical compression system as recited in claim 12, wherein the encoded data set includes the data without the semantic information that is common to the individual records in the data set.

27. A logical compression system as recited in claim 12, wherein the data is not encoded with the compression function, and wherein the semantic information that is common to the individual records in the data set is encoded with the compression function.

28. A computing device comprising the logical compression system as recited in claim 12.

29.   A logical compression system, comprising:

an encoded data set having a plurality of individual records, each of the individual records including data;

an expansion function that includes semantic information that is common to the individual records in the encoded data set, the semantic information describing the data in each of the individual records; and

wherein the individual records in the encoded data set are expanded with the expansion function such that each of the individual records include the data and the semantic information that is common to the individual records.

30.   A logical compression system as recited in claim 29, wherein the encoded data set and the expansion function are received from a data provider that generates the encoded data set with a compression function determined from the common semantic information.

31.   A logical compression system as recited in claim 29, wherein the data is text data and each of the individual records include the text data and semantic information associated with the text data after being expanded with the expansion function, and wherein the quantity of the semantic information associated with the text data is significantly greater than the quantity of the text data in each of the individual records.

32. A logical compression system as recited in claim 29, wherein the data is image data and each of the individual records include the image data and semantic information associated with the image data after being expanded with the expansion function, and wherein the quantity of the semantic information associated with the image data is significantly greater than the quantity of the image data in each of the individual records.

33. A logical compression system as recited in claim 29, wherein the individual records in the encoded data set are rendered after the individual records are expanded with the expansion function.

34. A logical compression system as recited in claim 29, wherein individual records in the encoded data set are rendered before the individual records are expanded with the expansion function.

35. A logical compression system as recited in claim 29, wherein the encoded data set includes the data without the semantic information that is common to the individual records in the encoded data set.

36. A logical compression system as recited in claim 29, wherein the data is not expanded with the expansion function, and wherein the semantic information that is common to the individual records in the encoded data set is expanded with the expansion function.

37. A computing device comprising the logical compression system as recited in claim 29.

38. A method, comprising:

determining a compression function for a data set having a plurality of individual records, the compression function determined from information that is common to the individual records in the data set;

generating an encoded data set using the compression function by removing the information that is common to the individual records in the data set; and

determining an expansion function for the encoded data set, the expansion function including the information that is common to the individual records in the data set.

39. A method as recited in claim 38, further comprising transmitting the expansion function and the encoded data set to a destination device.

40. A method as recited in claim 38, further comprising compressing the encoded data set using a content compression algorithm to generate a compressed encoded data set, and transmitting the expansion function and the compressed encoded data set to a destination device.

41. A method as recited in claim 38, further comprising expanding the encoded data set using the expansion function, wherein individual records in the encoded data set are expanded to include the common information.

42. A method as recited in claim 38, further comprising transmitting the expansion function and the encoded data set to a destination device, and expanding the encoded data set using the expansion function, wherein individual records in the encoded data set are expanded to include the common information.

43. A method as recited in claim 42, further comprising displaying the individual records in the encoded data set after said expanding the encoded data set.

44. A method as recited in claim 42, further comprising displaying the individual records in the encoded data set before said expanding the encoded data set.

45. A method as recited in claim 38, wherein the individual records include text data and information associated with the text data to describe the text data.

46. A method as recited in claim 38, wherein the individual records include text data and information associated with the text data to describe the text data, and wherein the quantity of the information is significantly greater than the quantity of the text data in each of the individual records.

47. A method as recited in claim 38, wherein the individual records include image data and information associated with the image data to describe the image data.

48. A method as recited in claim 38, wherein the individual records include image data and information associated with the image data to describe the image data, and wherein the quantity of the information is significantly greater than the quantity of the image data in each of the individual records.

49. A method as recited in claim 38, further comprising receiving a request for the data set, and said determining the compression function after said receiving the request.

50. A method as recited in claim 38, further comprising receiving a request for the data set, and said determining the compression function before said receiving the request.

51. A method as recited in claim 38, wherein the entire data set is encoded using the compression function when said generating the encoded data set.

52. A method as recited in claim 38, wherein said generating includes removing only the information that is common to the individual records in the data set.

53. A method as recited in claim 38, wherein the individual records include data and information to describe the data, and wherein the encoded data set includes the data without the information that is common to the individual records in the data set.

54. A method as recited in claim 38, wherein:

the individual records include data and information to describe the data;

the data is not encoded using the compression function when said generating the encoded data set; and

the information that is common to the individual records in the data set is encoded using the compression function when said generating the encoded data set.

55. One or more computer-readable media comprising computer-executable instructions that, when executed, direct a computing system to perform the method of claim 38.

56. A method, comprising:

identifying a compression function associated with a data set having a plurality of records, the compression function including semantic information that is common to multiple records in the data set;

encoding the data set using the compression function to generate an encoded data set;

identifying an expansion function associated with the encoded data set, the expansion function including the semantic information that is common to the multiple records in the data set; and

transmitting the expansion function and the encoded data set to a destination device such that the destination device can expand the encoded data set using the expansion function.

57. A method as recited in claim 56, further comprising compressing the encoded data set using a content compression algorithm before the encoded data set is transmitted to the destination device.

58. A method as recited in claim 56, further comprising expanding the encoded data set with the expansion function, wherein multiple records in the encoded data set are expanded to include the common semantic information.

59. A method as recited in claim 56, further comprising displaying multiple records in the encoded data set after the destination device expands the encoded data set.

60. A method as recited in claim 56, further comprising displaying multiple records in the encoded data set before the destination device expands the encoded data set.

61. A method as recited in claim 56, wherein the plurality of records include text data and semantic information associated with the text data to describe the text data.

62. A method as recited in claim 56, wherein the plurality of records include text data and semantic information associated with the text data to describe the text data, and wherein the quantity of the semantic information is significantly greater than the quantity of the text data in each of the plurality of records.

63. A method as recited in claim 56, wherein plurality of records include image data and semantic information associated with the image data to describe the image data.

64. A method as recited in claim 56, wherein plurality of records include image data and semantic information associated with the image data to describe the image data, and wherein the quantity of the semantic information is significantly greater than the quantity of the image data in each of the plurality of records.

65. A method as recited in claim 56, wherein the entire data set is encoded using the compression function when said encoding.

66. A method as recited in claim 56, wherein said encoding comprises removing only the semantic information that is common to the multiple records in the data set.

67. A method as recited in claim 56, wherein the plurality of records include data and semantic information to describe the data, and wherein the encoded data set includes the data without the semantic information that is common to the multiple records in the data set.

68. A method as recited in claim 56, wherein:

the plurality of records include data and semantic information to describe the data;

the data is not encoded using the compression function when said encoding; and

the semantic information that is common to the multiple records in the data set is encoded using the compression function when said encoding.

69. One or more computer-readable media comprising computer-executable instructions that, when executed, direct a computing system to perform the method of claim 56.

70. A computer-readable medium comprising computer executable instructions that, when executed, direct a computing system to perform a method comprising:

identifying a compression function associated with a plurality of data records, the compression function including semantic information that is common to multiple records of the plurality of data records;

encoding the multiple records using the compression function to generate a data set; and

identifying an expansion function associated with the data set, the expansion function including the semantic information that is common to the multiple records.

71. One or more computer-readable media as recited in claim 70, wherein the method further comprises transmitting the expansion function and the data set to a destination device such that the destination device can expand the data set using the expansion function.

72. One or more computer-readable media as recited in claim 70, wherein the method further comprises expanding the data set using the expansion function, wherein multiple records in the data set are expanded to include the common semantic information.

73. One or more computer-readable media as recited in claim 70, wherein the method further comprises transmitting the expansion function and the data set to a destination device, and expanding the data set using the expansion function, wherein multiple records in the data set are expanded to include the common semantic information.

74. One or more computer-readable media as recited in claim 70, wherein the plurality of records include data and semantic information to describe the data, and wherein the data set includes the data without the semantic information that is common to the multiple records.

75. A method, comprising:

determining a compression function for multiple Web pages having a common configuration defined by structure data;

generating an encoded Web page structure using the compression function by removing the structure data that is common to the multiple Web pages; and

determining an expansion function for the encoded Web page structure, the expansion function including the structure data that is common to the multiple Web pages.

76. A method as recited in claim 75, further comprising transmitting the expansion function and the encoded Web page structure to a destination device.

77. A method as recited in claim 75, further comprising expanding the encoded Web page structure using the expansion function.

78. A method as recited in claim 75, further comprising transmitting the expansion function and the encoded Web page structure to a destination device, and expanding the encoded Web page structure using the expansion function.

79. A method as recited in claim 75, further comprising representing the encoded Web page structure with a single character identifier when said generating the encoded Web page structure.

80. A method as recited in claim 75, further comprising representing the encoded Web page structure with a single character identifier when said generating the encoded Web page structure if all of the structure data is common to the multiple Web pages.

81. A method as recited in claim 75, wherein the structure data is HTML (hypertext markup language) code.

82. One or more computer-readable media comprising computer-executable instructions that, when executed, direct a computing system to perform the method of claim 75.